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Empowering innovative and active citizens: Design education in an Australian independent school

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Abstract

Consumerism is arguably one of the strongest forces affecting society today. Its affect on young people and their ability and desire to create, design, and innovate is cause for concern. It has been suggested that design, when viewed as “a fundamental category of meaning making” (Cope and Kalantzis, 2010, p.597), can be conceived as a “foundational paradigm for representation and action” (Cope and Kalantzis, 2011, p.49). As a component of a general education, it has the capacity to give future generations a framework for collaborative creative and critical thinking required for business innovation, while developing resourceful optimism, motivation, morality and the citizenship needed to develop awareness and resilience to this ideology (Design Commission, 2011; Design Council, 2011). However, to date clearly defined frameworks and empirical data surrounding design education integration in secondary school contexts and its impact on innovation and active citizenship in Australia, is extremely limited.

This paper will explore the value of a hands-on and collaborative design-based education model in an independent secondary school environment in Australia and its effect on students’ self-perception, core beliefs, empowered participation and ability to innovate towards sustainability. Following is an overview of relevant literature, the research question, and potential significance and contribution of this research.

K7-12; Design Education; Empowered Participation; Active Citizenship; Collaborative Learning; Creative Economy

Over the past two decades, with the impact of the globalization and internationalization of economies and the rapid development of information and communication technologies (ICT), our

society has transformed from a postindustrial economy to a creative economy (Peters & Araya, 2010, p.xx), in which ideas and knowledge function as commodities (Anderson, 2008). A consequence of this transition has been the transformation of a labour intensive workforce, requiring flexible, decentralized, networked and multi-skilled individuals and organizations prepared for evolving jobs and markets that do not yet exist. Richard Florida (2004) and others estimate that nearly one third of the future workforce will be identified within the 'Creative Workforce' because the nature of their work is converting latent symbolic value into economic and social assets. The problem addressed in this paper is that currently many young people are not well prepared to thrive in the creative economy due their low capacity to creatively solve unique problems, innovate across several fields, and design. The question must then be asked, why is this and what can be done.

As a result of living immersed in consumer-driven cultures, many young people have imbibed a core identity of 'consumer' or 'prosumer' (Toffler, 1980), which has impacted negatively upon the individual and society. According to Jennifer Hill (2011, p.347) "There is mounting evidence to suggest that the structure of childhood is eroding and children are suffering from serious physical, emotional and social deficits directly related to consumerism." The negative effects of consumerism, such as unsustainable consumption, the depletion of natural resources, perpetual dissatisfaction, unethical production practices, psychological problems, etc. are widely known, yet because of its intimate connection with modern mainstream culture it largely remains a cultural blind spot. As Thorpe (2012, p.vii) maintains, "It's hard to link the systemic and sometimes abstract problems of consumerism and growth to daily activities. We're all so deep inside the system it's hard to see a way out." In order to prepare young people for the challenges and opportunities they will encounter in the creative economy, our education system might first need to be reconstructed to address the underlying problems of entitlement and passive consumer identity.

It is the proposition of this research that there is a need to identify the impact consumerism is having on the willingness and ability of young people to engage in creative play, innovate, and design and to develop a collaborative design-based education framework that helps young people reengage creatively in life as innovative participants rather than passive consumers.

Literature:

Historically, there is a strong precedence for the development of education models to address societal shifts. Education approaches such as Steiner, Montessori, and the Reggio model were all developed in part due to the rigidity and inability of the dominant structures to address the needs of the young people of their time. Rudolf Steiner, an Austrian philosopher, social reformer, architect, artist and scientist, founded his first school in Stuttgart, Germany in 1919. "The prime purpose of

Steiner Education is to support and educate children such that their own innate and unique human qualities may come to greater fulfillment (<http://www.steinereducation.edu.au>). A current Steiner school website (<http://www.kildaresteinerschool.org>) states that “by stimulating a child's curiosity and creativity, a Steiner Waldorf education aims to foster a mind-set that is the exact opposite of passive consumerism. It equips children to make a positive contribution to the world, not simply to fit into an established order, providing a secure foundation for their future resilience, social and emotional intelligence.”

Globally, interdisciplinary design education initiatives are increasingly featuring in educational systems at all levels to ensure delivery of a workforce equipped for future industry innovation and active citizenship. In the USA for example, a number of interesting primary and secondary level education initiatives are exploring interdisciplinary, online/blended teaching modes for personalized learning, integrating design across curricula (Design Commission, 2011, p. 43; Bakhshi, Hargreaves, & Mateos-Garcia, 2013, p.101). iZone and the School of One in New York utilize highly tailored online and blended learning, and combine different learning modes in the classroom (Bakhshi, Hargreaves, & Mateos-Garcia, 2013, p.101). Zande (2010, p.253) reports that the teaching of design pedagogy occurs in nearly a dozen design-based curricular schools in the United States, including the Charter High School for Architecture + Design (CHAD) in Philadelphia; the School of Urban Planning and Architecture (SUPAR) in Milwaukee; the Design Science High School in Fresno; and The Design Lab Early College High School in Cleveland.

In Australia, as design is not delivered as an overall performance (OP) ranking subject for university entry in schools as part of the National Curriculum, design education programs in the secondary education sector, have been largely limited to programs delivered by cultural institutions (e.g. short programs by art galleries/museums), or by proactive teachers taking their own initiatives to integrate ‘design’ within existing subject areas and learning benchmarks (Wright, Davis & Bucolo, 2013, pp.14-18; 31-33). The design-based curricular chartered school model is largely non-existent in Australia and globally there is little research on the success of this model in delivering on 21st century skills (The Partnership for 21st Century Skills, 2009).

Critically, empirical data surrounding design education integration in any secondary school context, and its impact on national innovation and education systems, is virtually non-existent except for small isolated studies carried out as part of research projects such as *Taking Design Thinking to Schools* (Stanford University, 2012; Carroll et.al, 2010). More locally, Hooper, Welch & Wright (2013) provide some evidence of the impact of design in the classroom in empowering students from highly diverse cultural and social backgrounds

to engage in authentic, participatory design processes, and preparing them for future social and environmental challenges, and increasing personal and community resilience.

Research Gap:

Highlighted literature described above to some extent addresses the value of design education but does not provide clearly defined frameworks for the application and assessment of design-based learning in the education sector in Australia, particularly in alternative models such as independent and chartered schools. This research explicitly addresses this knowledge gap, and highlights the value of design education in the development of personal and social identity, innovation towards sustainability, resilience, and wellbeing.

Research Question:

This research will explore different education methodologies, the relationship between consumerism and creative innovation in young people, and the process by which young people develop a core identity. The primary question guiding this research is:

How can design-based education contribute to Australian secondary school students moving from an entitled consumer identity to an empowered innovative participant identity?

Research Significance and Contribution

This research has the potential to impact; teachers in the design and delivery of learning projects, schools in the development and cohesion of curriculum, and education policy makers in the integration of design education into current curriculum. This research could also contribute to the development of other pedagogical tools aimed at minimizing and transforming certain consumeristic behaviors in young people.

Future Work

The study introduced in this paper will extend current theory on design-based learning in secondary school contexts by using relevant literature in the areas of design, education, and identity development to develop a series of action research projects. The researcher will examine through a series of Australian case studies with small groups of secondary school students from ages 15 -18 in an independent school learning environment, the transformative value of a design-based curriculum in empowering innovation skills and active citizenship and its impact on self identity, mindsets and behavior. Project units will sit within the Australian Core Skills Framework (Australian government, n.d.) but will be structured and delivered in a way to encourage creative problem solving, innovation, and non-dualistic thinking.

Research outcomes from these case studies will be derived from observation, student journals, qualitative interviews with the schoolteachers and facilitators, and focus groups with the students

at various intervals throughout the projects. This triangulated qualitative data will be thematically analyzed, with findings to inform a design-based learning model. It is the proposition of this research that insights could inform a whole school context where design-based learning and collaborative learning practices could be adapted and integrated across all subject areas.

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PhD Student Biography

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